

a VSB demodulator operable to demodulate the VSB modulated signal to a VSB demodulated signal; and

a clock reproducer operable to phase synchronize entire codes of the QAM modulated signal when the selected signal is the QAM modulated signal and to phase synchronize codes of the VSB modulated signal intermittently at predetermined intervals when the selected signal is the VSB modulated signal.

¹⁴
~~17~~. A signal receiving apparatus according to claim ¹³~~16~~, further comprising:

a controller operable to produce a control signal to extract detected codes from the VSB modulated signal;

wherein said clock reproducer is operable to phase synchronize codes of the VSB modulated signal according to the control signal.

¹⁵
~~18~~. A signal receiving method comprising:

said signal receiving method capable of receiving a VSB modulated signal and a QAM modulated signal;

demodulating the QAM modulated signal to a QAM demodulated signal;

demodulating the VSB modulated signal to a VSB demodulated signal; and

phase synchronizing entire codes of the QAM modulated signal when the selected signal is the QAM modulated signal and to phase synchronize codes of the VSB modulated signal intermittently at predetermined intervals when the selected signal is the VSB modulated signal.

¹⁴
~~19~~. A signal receiving method according to claim ¹⁵~~18~~, further comprising:

producing a control signal to extract detected codes from the VSB modulated signal;

wherein said phase synchronizing is operable to phase synchronize codes of the VSB modulated signal according to the control signal.